Video SWG Minutes during SA4#120e

## 9.1 Opening of the session

Mr. Gilles Teniou (Tencent, Chairman of Video SWG) opens the Video SWG on August 18, 2022 at 16:30 CEST.

E-mail discussion started already on Wed, 17 Aug 2022 08:45:24 +0000.

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| --- | --- | --- |
| [Start of SA4#120-e meeting - VIDEO SWG](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;44090ab9.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 08:45:24 +0000 |

Mr. Thomas Stockhammer (Qualcomm) is assigned as scribe.

The minutes are shared [Video SWG Minutes during SA4#120e](https://docs.google.com/document/d/1mOTlrt4j2Y0E9Sk5qnKVAe1g1zSgtaaIISyZFGgcUNc/edit?usp=sharing).

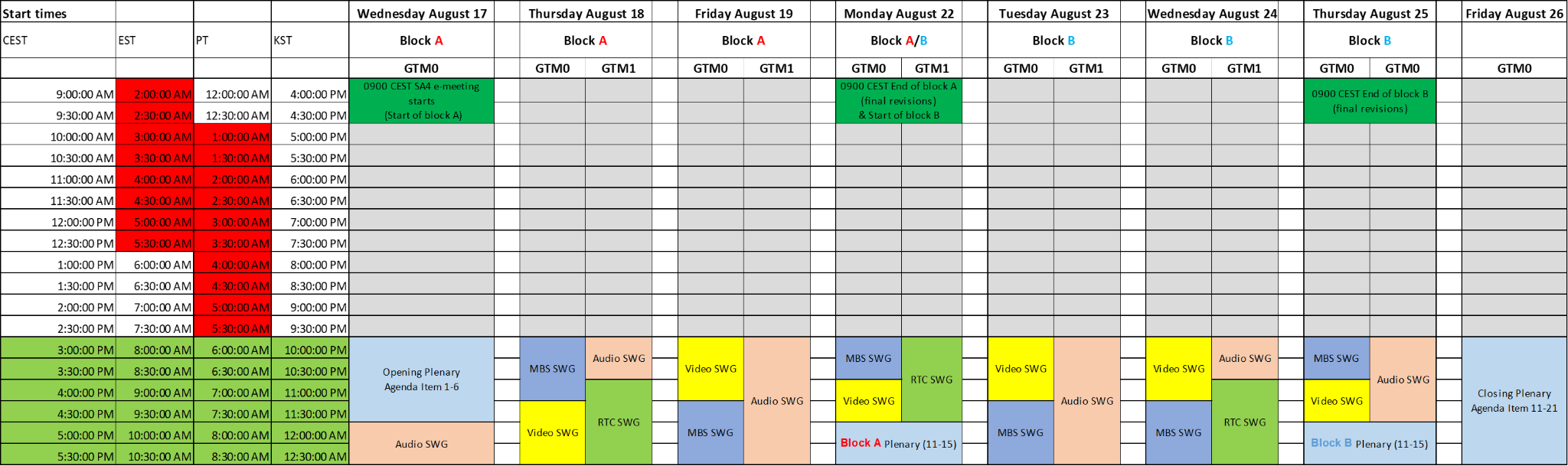
Attendees are listed [here](#6p4p3oudrmsc), please tickle the box next to your name.

All e-mail discussions during the meeting can be tracked here:

* https://list.etsi.org/scripts/wa.exe?A1=ind2208C&L=3GPP\_TSG\_SA\_WG4\_VIDEO
* https://list.etsi.org/scripts/wa.exe?A1=ind2208D&L=3GPP\_TSG\_SA\_WG4\_VIDEO

The latest timestamp for e-mail is here: Thu, 25 Aug 2022 14:41:59 +0000

**SA4 Schedule:**



**Video Schedule**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone/session** | **Date** | **CEST** | **PDT** | **KST** |
| Start of SA4 e-meeting (Email) | 17th Aug | 9am | midnight (-1) | 4pm |
| Start of Block A | 17th Aug | 9am | midnight (-1) | 4pm |
| **SA4 Opening plenary** | | | | |
| **Opening plenary Telco** | 17th Aug | 3pm  5pm | 6am  8am | 10pm  midnight |
| **VIDEO SWG Sessions (Block A)** | | | | |
| Slot 1 (90min) | 18th Aug | 4:30pm  6pm | 7:30am  9am | 11:30pm  1am (+1) |
| Slot 2 (90min) | 19th Aug | 3pm  4:30pm | 6am  7:30am | 10pm  11:30pm |
| End of Block A (final revisions)  Start of Block B | 22nd Aug | 9am | midnight (-1) | 4pm |
| Slot 3 (60min) | 22nd Aug | 4pm  5pm | 7am  8am | 11pm  midnight |
| Block A plenary | 22nd Aug | 5pm  6pm | 8am  9am | midnight  1am (+1) |
| **VIDEO SWG Sessions (Block B)** | | | | |
| Slot 4 (90 min) | 23rd Aug | 3pm  4:30pm | 6am  7:30am | 10pm  11:30pm |
| Slot 5 (90 min) | 24th Aug | 3pm  4:30pm | 6am  7:30am | 10pm  11:30pm |
| End of Block B | 25th Aug | 9am | midnight (-1) | 4pm |
| Slot 6 (60min) | 25th Aug | 4pm  5pm | 7am  8am | 11pm  midnight |
| Block B plenary | 25th Aug | 5pm  6pm | 8am  9am | midnight  1am (+1) |
| **SA4 Closing plenary** | | | | |
| **Closing plenary Telco** | 26th Aug | 3pm  6pm | 6am  9am | 10pm  1am (+1) |

The agenda and the registration of documents are approved.

## 9.2 Registration of documents

|  |  |  |  |
| --- | --- | --- | --- |
| TDoc | Title | Source | Agenda item |
| [S4-221089](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221089.zip) | VIDEO SWG telco report 25th May 2022 | VIDEO SWG Chair (Tencent) | 5.1 |
| [S4-221090](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221090.zip) | VIDEO SWG telco report 31st May 2022 | VIDEO SWG Chair (Tencent) | 5.1 |
| [S4-221091](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221091.zip) | VIDEO SWG telco report 28th June 2022 | VIDEO SWG Chair (Tencent) | 5.1 |
| [S4-221092](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221092.zip) | VIDEO SWG telco report 12th July 2022 | VIDEO SWG Chair (Tencent) | 5.1 |
| [S4-221067](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221067.zip) | Follow-up LS on QoS support with Media Unit granularity | SA2 | 5.2 |
| [S4-221068](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221068.zip) | SA WG2 5G Core Information Exposure to UE via DCAF Solution Considerations | SA2 | 5.2 |
| [S4-221075](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221075.zip) | Liaison statement from SC 29/WG 4 to 3GPP SA 4 on Compression of neural networks (NNC) | ISO/IEC JTC 1/SC 29 "Coding of audio, picture, multimedia and hypermedia information" Secretariat: JISC | 5.3 |
| [S4-221076](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221076.zip) | LS on draft new Recommendation ITU-T P.1320 (ex P.QXM): QoE assessment of extended reality (XR) meeting | ITU-T Study Group 12 | 5.3 |
| [S4-221079](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221079.zip) | LS on draft new Recommendation ITU-T G.1036 (ex G.QoE-AR): Quality of experience (QoE) influencing factors for augmented reality (AR) services | ITU-T Study Group 12 | 5.3 |
| [S4-221080](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221080.zip) | LS on draft revised Recommendation ITU-T G.191: Software tools for speech and audio coding standardization | ITU-T Study Group 12 | 5.3 |
| [S4-221081](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221081.zip) | Next-generation video codecs and the adoption of ITU-T H.266 | ISO/IEC 23090-3 Versatile Video Coding (VVC) and T/AI 109.2-2021: Intelligent Media Coding - Part 2: Video (AVS3) in DVB specifications | DVB Technical Module Ad-Hoc Group on Audio-Visual Content (TM-AVC) | 5.3 |
| [S4-221083](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221083.zip) | Release of VRIF guidelines on volumetric video streaming | VRIF Liaison WG | 5.3 |
| [S4-220971](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220971.zip) | [FS\_5GVideo] Miscellaneous Corrections | Qualcomm incorporated | 9.4 |
| [S4-220987](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220987.zip) | dCR for corrections in TR 26.998 | SAMSUNG R&D INSTITUTE JAPAN | 9.4 |
| [S4-221084](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221084.zip) | Proposed corrections to TR 26.955 | Ericsson India Private Limited | 9.4 |
| [S4-220935](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220935.zip) | Candidate 2D video capabilities for MeCAR | InterDigital, Inc. | 9.5 |
| [S4-220936](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220936.zip) | Interest of transparency information in the context of MeCAR Edgar Architecture | InterDigital, Inc. | 9.5 |
| [S4-220972](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220972.zip) | [MeCAR] Considerations on Split-Runtime Architecture and Media Handling | Qualcomm incorporated | 9.5 |
| [S4-220977](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220977.zip) | AR media types and transport discussion for MeCAR | HuaWei Technologies Co., Ltd | 9.5 |
| [S4-221036](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221036.zip) | On processing flow and observation point | Samsung Electronics Czech | 9.5 |
| [S4-221037](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221037.zip) | On MR split rendering information | Samsung Electronics Czech | 9.5 |
| [S4-221038](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221038.zip) | On display capability of AR glasses | Samsung Electronics Czech | 9.5 |
| [S4-221044](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221044.zip) | Updated Work Plan for MeCAR v2.0 | Xiaomi Communications | 9.5 |
| [S4-221060](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221060.zip) | Proposed updates to EDGAR-1 architecture | Xiaomi Communications | 9.5 |
| [S4-221064](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221064.zip) | On frame submission to the AR Runtime in EDGAR-1 architecture | Xiaomi Communications | 9.5 |
| [S4-220947](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220947.zip) | [FS\_XRTraffic] Discussion on XR Traffic Model | vivo Mobile Communication (S) | 9.6 |
| S4-220973 | [FS\_XRTraffic] Proposed Updates to TR 26.926 | Qualcomm incorporated | 9.6 |
| S4-220974 | [FS\_XRTraffic] Proposed Updated Time Plan | Qualcomm incorporated | 9.6 |
| S4-221021 | [FS\_AI4Media] Proposed Updated Time and Work Plan | Samsung Electronics Benelux BV | 9.7 |
| [S4-221022](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221022.zip) | [FS\_AI4Media] Permanent Document v0.3 | Samsung Electronics Benelux BV | 9.7 |
| [S4-221023](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221023.zip) | [FS\_AI4Media] Edits to section on use cases and scenarios | Samsung Electronics Benelux BV | 9.7 |
| [S4-221024](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221024.zip) | [FS\_AI4Media] Service architecture for split AIML inference with uplink | Samsung Electronics Benelux BV | 9.7 |
| [S4-221025](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221025.zip) | [FS\_AI4Media] Related work in 3GPP | Samsung Electronics Benelux BV | 9.7 |
| [S4-221039](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221039.zip) | [FS\_AI4Media] Architectures and service flows updates | InterDigital Finland Oy | 9.7 |
| [S4-221040](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221040.zip) | [FS\_AI4Media] Object Recognition in Image and Video use-case update | InterDigital Finland Oy | 9.7 |
| [S4-221041](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221041.zip) | [FS\_AI4Media] Split topologies update | InterDigital Finland Oy | 9.7 |
| [S4-221042](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221042.zip) | [FS\_AI4Media] Updates to definitions | InterDigital Finland Oy | 9.7 |
| [S4-221043](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221043.zip) | [FS\_AI4Media] New Neural Network hybrid coding use-case | InterDigital Finland Oy | 9.7 |
| [S4-221093](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221093.zip) | AI/ML model optimization for transport | Qualcomm Technologies Ireland | 9.7 |
| [S4-221003](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221003.zip) | Collection of current work on ARMR QoE in ITU-T | Huawei, Hisilicon, China Unicom | 9.8 |
| [S4-221008](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221008.zip) | [FS\_ARMRQoE] TR 26.812 skeleton v0.0.1 | China Unicom | 9.8 |
| [S4-221009](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221009.zip) | Work Plan for the study on ARMR QoE metrics V1.0 | China Unicom | 9.8 |
| [S4-220975](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220975.zip) | Follow-up on TR 26.955: HEVC Improvements | Qualcomm incorporated | 9.9 |

## 9.3 Reports and liaisons from other groups

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| [S4-221075](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221075.zip) | Liaison statement from SC 29/WG 4 to 3GPP SA 4 on Compression of neural networks (NNC) | ISO/IEC JTC 1/SC 29 "Coding of audio, picture, multimedia and hypermedia information" Secretariat: JISC | Jayeeta Saha |

**E-mail Discussion:**

Not triggered

**Revisions:**

none

**Online Discussion:**

* Gilles presents
* Eric: we already have some information in the PD
* Imed: We have some use cases some federated learning. Also a comment on the efficiency, do they claim that using these compressed models would be more efficient w/o compression. Any evidence and results would be good.

**Decision:**

* **We add information on the second edition to PD**
* **Otherwise noted**

**S4-221075** is **noted.**

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| --- | --- | --- | --- |
| [S4-221076](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221076.zip) | LS on draft new Recommendation ITU-T P.1320 (ex P.QXM): QoE assessment of extended reality (XR) meeting | ITU-T Study Group 12 | Jayeeta Saha |

**Online Discussion:**

* Gilles presents
* Shuai: We have some input with reference to these documents
* Thomas: Good and informative document. However, we could not identify to what extent the information has been verified by subjective tests and to what extent the data can be measured.
* Gilles: proposes to note
  + OK

**Decision:**

* **Noted**

**S4-221076** is **noted.**

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| --- | --- | --- | --- |
| [S4-221079](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221079.zip) | LS on draft new Recommendation ITU-T G.1036 (ex G.QoE-AR): Quality of experience (QoE) influencing factors for augmented reality (AR) services | ITU-T Study Group 12 | Jayeeta Saha |

**Online Discussion:**

* Gilles presents
* Similar discussion as for 1076

**Decision:**

* **Note**

**S4-221079** is **noted.**

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| --- | --- | --- | --- |
| [S4-221081](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221081.zip) | Next-generation video codecs and the adoption of ITU-T H.266 | ISO/IEC 23090-3 Versatile Video Coding (VVC) and T/AI 109.2-2021: Intelligent Media Coding - Part 2: Video (AVS3) in DVB specifications | DVB Technical Module Ad-Hoc Group on Audio-Visual Content (TM-AVC) | Jayeeta Saha |

**Online Discussion:**

* Gilles presents
* Thomas:
  + Informing the 3GPP colleagues that on behalf of DVB, we had been invited to provide a brief summary of the report. The following slides were used: <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/3GPP%205G%20Video%20Characterization-r3.pptx>
  + Gilles and I are also invited to the DVB meeting after IBC for representation of the same slides.
  + We asked DVB if any additional information would be needed and they responded that the slides are good enough. Based on this it is proposed to note this.
* Gilles: support this.

**Decision:**

* **The LS is noted based on the discussion above.**

**S4-221081** is **noted.**

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| [S4-221083](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221083.zip) | Release of VRIF guidelines on volumetric video streaming | VRIF Liaison WG | Jayeeta Saha |

**Online Discussion:**

* Justin presents
* Thomas: Are there any tools or test assets available?
  + Justin: Not available in public.
* Emmanuel: Thanks for presentation. On-Demand or real-time
  + Justin: don’t know
* Gilles: On Media profile for V-PCC, do you have an idea how the profiling was done?
  + Justin: No sub-profiling or anything like this
* Gilles: What is the deadline for comments?
  + Justin: already passed, but can be updated later. More draw attention to experts to check the guidelines.
* Justin: Interest on this in 3GPP?
  + Gilles: to some extent, but logical progress of topics. Should be identified by service requirements.

**Decision:**

* **Invitation to check offline**
* **Noted otherwise**

**S4-221083** is **noted.**

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| [S4-221067](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221067.zip) | Follow-up LS on QoS support with Media Unit granularity | SA2 | Jayeeta Saha |

**Online Discussion:**

* Gilles presents
* On Q1
  + Thomas: No such considerations of media handling in SA4 specification exists according to our knowledge. We should respond along the lines
  + QI: support this
  + Gilles: also support
* On Q2:
  + Thomas: yes on q 2a, but kind of no on q2. Should elaborate on HTTP Streaming, 5GMS and so on
  + Qi: agree as well, we should elaborate the details of the operation of HTTP Streaming

**Decision:**

* **We agree on the principle sentiment**
* **We respond**
* **Thomas and Qi will prepare a response**

**S4-221067** is **replied in S4-221148.**

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| [S4-221148](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221067.zip) | Reply LS on Follow-up LS on QoS support with Media Unit granularity | SA4 Video SWG | Thomas Stockhammer |

**E-mail Discussion:**

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| --- | --- | --- |
| [Draft Reply available on Video Drafts (3GPP SA4 Video SWG Offline on Reply LS to SA2)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;708e90c3.2208D&S=) | Thomas Stockhammer | Wed, 24 Aug 2022 03:04:27 +0000 |
| [Draft Reply available on Video Drafts (3GPP SA4 Video SWG Offline on Reply LS to SA2)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;879cd986.2208D&S=) | Zhao, Shuai | Wed, 24 Aug 2022 04:42:22 +0000 |

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| [Upload S4-221148 and Summary of 3GPP SA4 Video SWG Offline on Reply LS to SA2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9b5ac2ac.2208D&S=) | Thomas Stockhammer | Wed, 24 Aug 2022 06:14:14 +0000 |
| [Upload S4-221148 and Summary of 3GPP SA4 Video SWG Offline on Reply LS to SA2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4029bd61.2208D&S=) | yixuelei(雷艺学) | Wed, 24 Aug 2022 08:00:29 +0000 |

**Online Discussion:**

* Thomas presents
* On Q1
  + Qi: recommends to remove the second paragraph.
  + Xi: recommends as well
  + Thomas also good.
  + Decision: we remove second part, otherwise ok
* On Q2:
  + Thomas: identified some typos
  + Iraj: Do we use fragmentation today?
    - Thomas: yes it is ok, using chunking
    - Iraj: We may not answer the question, but we factually answer so ok.
  + Dong: I have some information in this, explains

**Decision:**

* **Agreed in principle**
* **We will revise fixing the typos**

**S4-221148** is **revised to S4-221169.**

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| [S4-221169](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221169.zip) | Reply LS on Follow-up LS on QoS support with Media Unit granularity | SA4 Video SWG | Thomas Stockhammer |

**S4-221169** is **agreed and presented to SA4 plenary.**

## 9.4 CRs to Features in Release 17 and earlier

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| [S4-220971](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220971.zip) | [FS\_5GVideo] Miscellaneous Corrections | Qualcomm incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[Maintenance, 971, Block A, 18th Aug 1200CEST] [FS\_5GVideo] Miscellaneous Corrections](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;81d0ec4e.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 08:52:11 +0000 |
| [[Maintenance, 971, Block A, 18th Aug 1200CEST] [FS\_5GVideo] Miscellaneous Corrections](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1f07c297.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:57:11 +0000 |

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| [[Maintenance, 971, Block A, 18th Aug 1200CEST] [FS\_5GVideo] Miscellaneous Corrections](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1f07c297.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:57:11 +0000 |

**Decision:**

* **No comment was received.**
* **The document S4-220971 is agreed.**
* **A CR will be prepared accordingly including the agreements from 1084.**

**S4-220971** is **agreed.**

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| [S4-221147](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221147.zip) | CR26.955-0001 Miscellaneous Corrections (Rel-17) | Qualcomm incorporated, Ericsson | Thomas Stockhammer |

**S4-221147** is **presented to SA4 plenary.**

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| [S4-220987](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220987.zip) | dCR for corrections in TR 26.998 | SAMSUNG R&D INSTITUTE JAPAN | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[Maintenance, 987, Block A, 18th Aug 1200CEST] dCR for corrections in TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3d5dba98.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 08:52:34 +0000 |
| [[Maintenance, 987, Block A, 18th Aug 1200CEST] dCR for corrections in TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c2990e69.2208C&S=) | Thomas Stockhammer | Wed, 17 Aug 2022 20:19:43 +0000 |
| [[Maintenance, 987, Block A, 18th Aug 1200CEST] dCR for corrections in TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;edb0d322.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:11:52 +0000 |
| [[Maintenance, 987, Block A, 18th Aug 1200CEST] dCR for corrections in TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;66d46a37.2208C&S=) | Hakju Ryan Lee | Thu, 18 Aug 2022 22:38:54 +0900 |
| [[Maintenance, 987, Block A, 18th Aug 1200CEST] dCR for corrections in TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8c49340.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:54:28 +0000 |

**Decision:**

* **This contribution received support from Qualcomm. I also support the corrections.**
* **The document S4-220987 is agreed.**
* **A CR will be prepared accordingly.**

**S4-220987** is **agreed.**

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| [S4-221146](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221146.zip) | CR26.998-0001 Editorial Corrections | SAMSUNG R&D INSTITUTE JAPAN | Hakju Ryan Lee |

**Online Discussion:**

* Gilles presents
* No comments

**Decision:**

* Agreed.

**S4-221146** is **agreed and is presented to SA4 plenary.**

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| [S4-221084](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221084.zip) | Proposed corrections to TR 26.955 | Ericsson India Private Limited | Lukasz Litwic |

**E-mail Discussion:**

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| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e70d691a.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 08:52:55 +0000 |
| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f3ed3545.2208C&S=) | Thomas Stockhammer | Wed, 17 Aug 2022 20:49:04 +0000 |
| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dd913f86.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:06:25 +0000 |
| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dfefc0f6.2208C&S=) | Thomas Stockhammer | Thu, 18 Aug 2022 13:47:48 +0000 |
| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;31cff34b.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:56:42 +0000 |

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| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dfefc0f6.2208C&S=) | Thomas Stockhammer | Thu, 18 Aug 2022 13:47:48 +0000 |

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| [[Maintenance, 1084, Block A, 18th Aug 1200CEST] Proposed corrections to TR 26.955](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;31cff34b.2208C&S=) | teniou(TeniouGilles) | Thu, 18 Aug 2022 13:56:42 +0000 |

**Revisions:**

**Online Discussion:**

* Lukasz presents
* Thomas: Some effort but ok. We can agreed

**Decision:**

* Agreed - some editorial changes needed. Integrated into S4-221147

**S4-221084** is **agreed.**

## 9.5 MeCAR (Media Capabilities for Augmented Reality)

*WID:* [*SP-220242*](https://www.3gpp.org/ftp/TSG_SA/TSG_SA/TSGs_95E_Electronic_2022_03/Docs/SP-220242.zip) *New WID on ‘Media Capabilities for Augmented Reality’*

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| [S4-220935](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220935.zip) | Candidate 2D video capabilities for MeCAR | InterDigital, Inc. | Serge Defrance |

**E-mail Discussion:**

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| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;699708e6.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:12:59 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;53655f76.2208C&S=) | Emmanuel Thomas | Wed, 17 Aug 2022 15:48:13 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f1b88633.2208C&S=) | Iraj Sodagar | Wed, 17 Aug 2022 23:26:15 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;596c7d51.2208C&S=) | Stefan Döhla | Thu, 18 Aug 2022 09:22:47 +0200 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;98606f5b.2208C&S=) | Serge Defrance | Thu, 18 Aug 2022 11:21:03 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1925301f.2208C&S=) | Ali El Essaili | Thu, 18 Aug 2022 11:28:06 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b88f163b.2208C&S=) | Imed Bouazizi | Fri, 19 Aug 2022 02:58:38 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;79d62e2b.2208C&S=) | Ahmed Hamza | Fri, 19 Aug 2022 03:56:39 +0000 |
| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;26fc5ccf.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 09:25:53 +0000 |

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| [[MeCAR, 935, Block A, 19th Aug 1200CEST] Candidate 2D video capabilities for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3d2a8975.2208D&S=) | Serge Defrance | Mon, 22 Aug 2022 11:30:00 +0000 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-220935r01.docx

**Online Discussion:**

* August 2022/08/19
  + Gilles summarizes discussion
  + Serge represents the contribution - he refers to come back to this
  + Emmanuel: I am not disagreeing, just extensions need to be done
  + Thomas: I believe we could add this to the part we already have. It is a good template.
    - Iraj: What are you referring to as template?
    - Thomas: just show, what this is about.
    - Iraj: we need to define the capabilities
    - Thomas: we also had some first input on this matter
    - Gilles: We may not ask for media capabilities beyond typical display capabilities
    - Thomas: disagree - the processing allows many different cases for which you need higher capabilities
  + Thomas proposes to update as template.
* August 2022/08/22
  + Serge presents r02
    - Thomas: where would it go in PD? Replace
      * Serge: no
    - Emmanuel: will be added on top, will be added as candidates
      * Thomas: ok, remain supportive, just do not want to replace

**Decision:**

* **Call 1:**
  + **We agree to revise in r01 and revisit during washup**
  + **The basic idea is to document the capabilities as initial candidates and to also document this as a documentation templates**
  + **The document is parked.**
* **Call 2:** 
  + **We agree revision r01**

**S4-220935** is **revised to S4-221152.**

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| [S4-221152](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221152.zip) | Candidate 2D video capabilities for MeCAR | InterDigital, Inc. | Serge Defrance |

**S4-221152** is **agreed.**

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| [S4-220936](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220936.zip) | Interest of transparency information in the context of MeCAR Edgar Architecture | InterDigital, Inc. | Serge Defrance |

**E-mail Discussion:**

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| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;22c5bcb4.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:13:17 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ececadd.2208C&S=) | Emmanuel Thomas | Wed, 17 Aug 2022 16:03:28 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;15acc681.2208C&S=) | Iraj Sodagar | Wed, 17 Aug 2022 22:44:37 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8b54cbbd.2208C&S=) | Dimitri Podborski | Wed, 17 Aug 2022 16:30:54 -0700 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4c839081.2208C&S=) | Serge Defrance | Thu, 18 Aug 2022 11:24:11 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ee8340de.2208C&S=) | Emmanuel Thomas | Thu, 18 Aug 2022 12:35:39 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1138d35e.2208C&S=) | Ahmed Hamza | Fri, 19 Aug 2022 04:36:25 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b112881c.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 09:36:19 +0000 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1b2a8cdd.2208C&S=) | Serge Defrance | Fri, 19 Aug 2022 12:10:13 +0000 |

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| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;74d1b4c3.2208C&S=) | Dimitri Podborski | Fri, 19 Aug 2022 13:38:53 -0700 |
| [[MeCAR, 936, Block A, 19th Aug 1200CEST] Interest of transparency information in the context of MeCAR Edgar Architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ca143b1a.2208D&S=) | Serge Defrance | Mon, 22 Aug 2022 11:31:02 +0000 |

**Revisions:**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220936r01.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-220936r02.docx

**Online Discussion:**

* Call 2022/08/19:
  + Gilles summarizes the discussion
  + Serge presents r01
  + Emmanuel:
    - On MIAF, we do not have to add it as this is about tracks
    - Gltf based approach is also possible
  + Thomas:
    - We should add the processing and what information is needed on the processing. Also translation to work flows are needed
    - Concerns on just documenting specific ways to carry
  + Gilles:
    - First contribution is important, so we can add it
  + Emmanuel:
    - Should add some points along 2.2 as well
  + Thomas:
    - Prefer to add a processing understanding in the reference architecture
    - Clause 3 would only be an example of the carriage
  + We agree to revise
* Call 2022/08/22
  + Serge presents revision 2
  + Dimitri: Section 2.3.2 only discusses multi-track carriage. Should be changed to ISO BMFF track. And also allow single track carriage
    - Serge: is ok for me, can change
    - Emmanuel: agree as well
  + Emmanuel: Would suggest to add this under working assumptions in the PD
    - Agreed

**Decision:**

* **Call 1:**
  + **We agree to revise in r02 and revisit during washup**
  + **The comments from above should be taken into account**
  + **The document is parked.**
* **Call 2:**
  + **We agree on r02 taking into account the above comments**
  + **Needs revision**

**S4-220936** is **revised to S4-221153.**

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| [S4-221153](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221153.zip) | Interest of transparency information in the context of MeCAR Edgar Architecture | InterDigital, Inc. | Serge Defrance |

**S4-221153** is **agreed.**

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| [S4-220972](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220972.zip) | [MeCAR] Considerations on Split-Runtime Architecture and Media Handling | Qualcomm incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e8628f23.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:13:29 +0000 |
| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6b4e7fe2.2208C&S=) | Emmanuel Thomas | Wed, 17 Aug 2022 16:15:18 +0000 |
| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a82d3e12.2208C&S=) | Thomas Stockhammer | Wed, 17 Aug 2022 16:25:49 +0000 |
| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;24db58fb.2208C&S=) | Iraj Sodagar | Wed, 17 Aug 2022 23:01:14 +0000 |
| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;758d6ac7.2208C&S=) | Thomas Stockhammer | Thu, 18 Aug 2022 06:44:17 +0000 |
| [[MeCAR, 972, Block A, 19th Aug 1200CEST] Considerations on Split-Runtime Architecture and Media Handling](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ec36b12c.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 12:19:00 +0000 |

**Revisions:**

none

**Online Discussion:**

* Call 2022/08/19:
  + Gilles summarizes the discussion
  + Thomas presents
  + Iraj: Why is type 1 and type 3 different?
    - Thomas: type 3 is less constrained than type 1
    - Gilles: this is just a level question
    - Thomas: it may not be, the rendering capabilities may be higher. This may for example allow to render 3D assets.
    - Gilles: still a level question. HD and UHD
    - Thomas: no, it could be a rendering capability
  + Emmanuel: These are different instantations for EDGAR-1
    - Iraj: different instantatiations of EDGAR-1
    - Thomas: I have a different understanding. We have an AR Framework and EDGAR-1 UE is an instanstation.
    - Iraj: assume that there is a profile for each instantiation
    - Thomas: Profile is a non-defined term
  + Emmanuel: We need some consistency in the naming
  + We will have an offline on this matter

**Decision:**

* **Call 1:**
  + **Document needs an offline**
  + **Parked for now**
* **Call Aug 24/2022**
  + **Merge with 1045, 1064, 1045**

**S4-220972** is **revised to S4-221161.**

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| [S4-221161](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220972.zip) | [MeCAR] Update of AR UE device architecture and visual rendering process | Xiaomi, Qualcomm incorporated | Emmanuel Thomas |

**Online Discussion:**

* Emmanuel presents
* Gilles: Is OpenXR mandated?
  + Emmanuel: It is the basis.

**Decision:**

* **agreed**

**S4-221161** is **agreed.**

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| [S4-220977](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220977.zip) | AR media types and transport discussion for MeCAR | HuaWei Technologies Co., Ltd | Huan-yu Su |

**E-mail Discussion:**

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| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b1fa41a9.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:13:45 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fd9f94f6.2208C&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 17 Aug 2022 20:44:15 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;698002c0.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 14:43:32 +0900 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d6031ad5.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 14:45:26 +0900 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a66df83d.2208C&S=) | Huan-yu Su | Thu, 18 Aug 2022 09:41:22 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;87fa3094.2208C&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Thu, 18 Aug 2022 08:55:07 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7920108c.2208C&S=) | Huan-yu Su | Thu, 18 Aug 2022 11:01:27 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c56ab86e.2208C&S=) | Huan-yu Su | Thu, 18 Aug 2022 11:50:28 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ab912487.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 19:17:59 +0900 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;74d3eb94.2208C&S=) | Huan-yu Su | Thu, 18 Aug 2022 13:31:08 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;228551fb.2208C&S=) | Emmanuel Thomas | Thu, 18 Aug 2022 12:58:21 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4560b1ff.2208C&S=) | Huan-yu Su | Thu, 18 Aug 2022 23:20:03 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3bc9ab11.2208C&S=) | Imed Bouazizi | Fri, 19 Aug 2022 03:57:02 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6829c3d9.2208C&S=) | Huan-yu Su | Fri, 19 Aug 2022 09:58:00 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;20ab5877.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 12:34:21 +0000 |

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| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6c547561.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 07:45:32 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bda5ced1.2208D&S=) | Sungryeul Rhyu | Mon, 22 Aug 2022 14:56:43 +0900 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b83f862a.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 08:08:44 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5e012384.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 11:53:55 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1dd4e90e.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 14:12:35 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;11b694b8.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Mon, 22 Aug 2022 12:20:52 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8654570.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 14:45:09 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;94c340f.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 14:51:27 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;451a2f98.2208D&S=) | Emmanuel Thomas | Mon, 22 Aug 2022 12:53:03 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9a9c7a22.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 13:02:08 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3f95c24c.2208D&S=) | Huan-yu Su | Mon, 22 Aug 2022 15:10:01 +0200 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f99528d5.2208D&S=) | teniou(TeniouGilles) | Tue, 23 Aug 2022 09:52:52 +0000 |
| [[MeCAR, 977, Block A, 19th Aug 1200CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ca91d06d.2208D&S=) | Huan-yu Su | Tue, 23 Aug 2022 13:28:32 +0200 |

**Revisions:**

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| --- | --- | --- | --- |
|  | [S4-220977r01 AR media types and transmission discussion for MeCAR.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220977r01%20AR%C2%A0media%C2%A0types%C2%A0and%C2%A0transmission%C2%A0discussion%20for%20MeCAR.docx) | 2022/08/22 5:36 | 59,6 KB |
|  | [S4-220977r01\_samsung.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220977r01_samsung.docx) | 2022/08/22 5:54 | 59,6 KB |
|  | [S4-220977r02 AR media types and transmission discussion for MeCAR.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220977r02%20AR%C2%A0media%C2%A0types%C2%A0and%C2%A0transmission%C2%A0discussion%20for%20MeCAR.docx) | 2022/08/22 12:09 | 59,7 KB |
|  | [S4-220977r03 AR media types and transmission discussion for MeCAR.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220977r03%20AR%C2%A0media%C2%A0types%C2%A0and%C2%A0transmission%C2%A0discussion%20for%20MeCAR.docx) | 2022/08/22 12:49 | 60 KB |
|  | [S4-220977r04 AR media types and transmission discussion for MeCAR.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-220977r04%20AR%C2%A0media%C2%A0types%C2%A0and%C2%A0transmission%C2%A0discussion%20for%20MeCAR.docx) | 2022/08/22 13:02 | 59,9 KB |

**Online Discussion:**

* Call 2022/08/19
  + Gilles summarizes the e-mail discussion
  + Huan-yu: summarizes the discussion
  + Imed:
    - focus on column 4 is not relevant for Mecar, only for RTC
    - We should have a description of what the metadata is. Have a detailed description and also provide a reference.
    - First agreement would be on the left-most column
    - Huan-yu: agree on this
    - Nik: first two columns are relevant to MeCAR. 4th column for RTC.
    - Thomas: can we make non-timed/sparsely timed (event-based)/continuous (sample-based)
    - Gilles: create column type, definition, examples, size/bitrate, and time-characteristics
  + Saba: What is AR Mark? It should only be 1 quaternion, not 4.
    - Gilles: based on a use case.
  + A revision is expected - parked for now
* Call 2022/08/22
  + Huan-yu presents revision r04
  + Gilles: seems to not yet implement all details yet
    - Thomas: agree
  + More revisions - still parked

**Decision:**

* **Call 1:**
  + **We agree to revise and revisit during washup**
  + **The comments from above should be taken into account**
  + **The document is parked.**
* **Call 2:**
  + **Further revision needed based on comments above**
  + **The document is parked.**
* **Call 3: revised**

**S4-220977** is **revised to S4-221156.**

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| [S4-221156](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221156.zip) | AR media types and transport discussion for MeCAR | HuaWei Technologies Co., Ltd | Huan-yu Su |

**E-mail Discussion:**

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| [[MeCAR, 1156, Block A-ext, 24th Aug 1400CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cbcea7e8.2208D&S=) | teniou(TeniouGilles) | Tue, 23 Aug 2022 16:15:07 +0000 |
| [[MeCAR, 1156, Block A-ext, 24th Aug 1400CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5463093e.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 24 Aug 2022 11:21:18 +0000 |
| [[MeCAR, 1156, Block A-ext, 24th Aug 1400CEST] AR media types and transport discussion for MeCAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7fe67826.2208D&S=) | Huan-yu Su | Wed, 24 Aug 2022 14:25:21 +0200 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221156%20r01%20AR%C2%A0media%C2%A0types%C2%A0and%C2%A0transmission%C2%A0discussion%20for%20MeCAR.docx

**Online Discussion:**

* Huan-yu present r01
  + No comments

**Decision:**

* **R01 is agreed**
* **Needs revison**

**S4-221156** is **revised to S4-221162.**

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| [S4-221162](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221162.zip) | AR media types and transport discussion for MeCAR | HuaWei Technologies Co., Ltd | Huan-yu Su |

**S4-221162** is **agreed.**

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| [S4-221036](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221036.zip) | On processing flow and observation point | Samsung Electronics Czech | Sungryeul Rhyu |

**E-mail Discussion:**

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| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;41b48bf.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:13:59 +0000 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4f589aaa.2208C&S=) | Emmanouil Potetsianakis | Thu, 18 Aug 2022 09:30:27 +0000 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f8ed8930.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 19:41:31 +0900 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c01f89c1.2208C&S=) | Emmanouil Potetsianakis | Thu, 18 Aug 2022 12:22:45 +0000 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a58b128b.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 08:34:18 +0000 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;72d62858.2208C&S=) | Sungryeul Rhyu | Fri, 19 Aug 2022 19:45:44 +0900 |
| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a129a64f.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 12:42:23 +0000 |

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| [[MeCAR, 1036, Block A, 19th Aug 1200CEST] On processing flow and observation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ad53dd24.2208D&S=) | Sungryeul Rhyu | Wed, 24 Aug 2022 13:22:31 +0900 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221036r01.docx

**Online Discussion:**

* Call 2022/08/22
  + Gilles summarizes
  + SR asks for more time
  + Parked
* Call 2022/08/23
  + Will be revised and e-mail agreement triggered

**Decision:**

* **Call 1:**
  + **Parked**
* **Call 2: Revised**

**S4-221036** is **revised to S4-221155.**

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| [S4-221155](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221155.zip) | On processing flow and observation point | Samsung Electronics Czech | Sungryeul Rhyu |

**Online Discussion:**

* SR explains that he is not able to process 1155, so it is noted

**Decision:**

* **noted**

**S4-221155** is **noted.**

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| [S4-221037](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221037.zip) | On MR split rendering information | Samsung Electronics Czech | Sungryeul Rhyu |

**E-mail Discussion:**

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| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;224e08d7.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:14:12 +0000 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9539f454.2208C&S=) | Curcio, Igor (Nokia - FI/Tampere) | Wed, 17 Aug 2022 20:30:16 +0000 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cf7fe518.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 14:44:38 +0900 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fc953595.2208C&S=) | Emmanuel Thomas | Thu, 18 Aug 2022 12:48:37 +0000 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97208b18.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 22:40:19 +0900 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97208b18.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 22:40:19 +0900 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7dbbe664.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 09:20:49 +0000 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;81e93fe5.2208C&S=) | Sungryeul Rhyu | Fri, 19 Aug 2022 20:37:19 +0900 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;41ec59fa.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 12:51:04 +0000 |
| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;39d13309.2208C&S=) | Sungryeul Rhyu | Fri, 19 Aug 2022 21:57:46 +0900 |

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| [[MeCAR, 1037, Block A, 19th Aug 1200CEST] On MR split rendering information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7d0290b4.2208D&S=) | Sungryeul Rhyu | Mon, 22 Aug 2022 14:29:08 +0900 |

**Revisions:**

|  |  |  |
| --- | --- | --- |
| [S4-221037r01.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221037r01.docx) | 8/18/2022 5:32 | 38,5 KB |

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221037r02.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221037r03.docx

**Online Discussion:**

* Call 2022/08/19
  + Gilles summarizes
  + SR presents r02
  + Thomas: Do we have a definition for user surroundings?
    - Emmanuel: It is a world understanding
    - Thomas: I do still not understand it
  + Document is parked.
* Call 2022/08/22
  + SR presents r03
  + Thomas: I am still a bit unclear on the exact text what the process of the data flow is
    - SR: yes
    - Thomas: the first sentence is a bit confusing as it is a very specific application of the information
    - SR: ok to remove first sentence
    - Thomas: Ok for me as well

**Decision:**

* **Call 1:**
  + **We agree to revise further and revisit during washup**
  + **The comments from above should be taken into account**
  + **The document is parked.**
* **Call 2:**
  + **R03 is agreed with the comments above**
  + **The document is revised**

**S4-221037** is **revised.**

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| [S4-221154](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221154.zip) | On MR split rendering information | Samsung Electronics Czech | Sungryeul Rhyu |

**S4-221154** is **agreed.**

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| --- | --- | --- | --- |
| [S4-221038](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221038.zip) | On display capability of AR glasses | Samsung Electronics Czech | Sungryeul Rhyu |

**E-mail Discussion:**

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| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3aa42e75.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:14:21 +0000 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2c602952.2208C&S=) | Emmanuel Thomas | Thu, 18 Aug 2022 13:24:54 +0000 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;530f53a1.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 22:53:04 +0900 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;530f53a1.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 22:53:04 +0900 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;36ff2717.2208C&S=) | Emmanuel Thomas | Thu, 18 Aug 2022 14:30:01 +0000 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;386abada.2208C&S=) | Sungryeul Rhyu | Thu, 18 Aug 2022 23:55:59 +0900 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;75c186bf.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 08:52:01 +0000 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6489079a.2208C&S=) | Sungryeul Rhyu | Fri, 19 Aug 2022 20:02:53 +0900 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cf562015.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 11:26:35 +0000 |

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| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a75582e0.2208D&S=) | Sungryeul Rhyu | Mon, 22 Aug 2022 14:43:07 +0900 |
| [[MeCAR, 1038, Block A, 19th Aug 1200CEST] On display capability of AR glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bd5567e1.2208D&S=) | Sungryeul Rhyu | Mon, 22 Aug 2022 14:49:23 +0900 |

**Revisions:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | [S4-221038r01.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221038r01.docx) | 2022/08/22 5:41 | 393,2 KB |
|  | [S4-221038\_Xiaomi.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221038_Xiaomi.docx) | 2022/08/18 13:20 | 391,4 KB |
|  | [S4-221038\_Xiaomi\_Samsung.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221038_Xiaomi_Samsung.docx) | 2022/08/18 13:52 | 391,5 KB |

**Online Discussion:**

* Call 2022/08/22
  + Gilles summarizes
  + SR presents r1
  + Thomas: Can OpenXR support query of color space?
    - SR: yes
    - Thomas: ok makes sense
  + Thomas: checking the ambient light information, this is ok, but only applies to regular operation based on the use cases discussed here: <https://www.w3.org/TR/ambient-light/#usecases-requirements>
    - Gilles: let’s add a note on this
    - Thomas: ok
    - Online revision agreed

**Decision:**

* **Online revision agreed - needs revision**
* **Will add to permanent document**

**S4-221038** is **revised to S4-221149.**

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| [S4-221149](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221149.zip) | On display capability of AR glasses | Samsung Electronics Czech | Sungryeul Rhyu |

**S4-221149** is **agreed.**

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| [S4-221150](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221150.zip) | Updated Permanent Document v3.0 | Xiaomi Communications | Emmanuel Thomas |

**E-mail Discussion:**

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| [Latest MeCAR PD version in the Inbox](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;51427ae3.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 13:24:52 +0000 |
| [MeCAR PD draft 1 in draft folder for review](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;179f9a9d.2208D&S=) | Emmanuel Thomas | Thu, 25 Aug 2022 13:20:35 +0000 |
| [MeCAR PD draft 1 in draft folder for review](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;31231060.2208D&S=) | Serge Defrance | Thu, 25 Aug 2022 13:33:32 +0000 |
| [MeCAR PD draft 1 in draft folder for review](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;507d183d.2208D&S=) | Emmanuel Thomas | Thu, 25 Aug 2022 14:41:59 +0000 |

**S4-221150** is **presented to SA4 plenary.**

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| [S4-221044](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221044.zip) | Updated Work Plan for MeCAR v2.0 | Xiaomi Communications | Emmanuel Thomas |

**E-mail Discussion:**

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| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c61f6f97.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:14:33 +0000 |
| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ca719299.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 06:54:57 +0000 |
| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5e410dd3.2208C&S=) | teniou(TeniouGilles) | Fri, 19 Aug 2022 12:08:13 +0000 |
| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b34a80cb.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 12:14:18 +0000 |
| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f34f92ed.2208C&S=) | teniou(TeniouGilles) | Fri, 19 Aug 2022 12:22:41 +0000 |

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| [[MeCAR, 1044, Block A, 19th Aug 1200CEST] Updated Work Plan for MeCAR v2.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1c62d0d1.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 16:04:25 +0000 |

**Revisions:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | [S4-221044r01.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221044r01.docx) | 2022/08/19 16:02 | 53,4 KB |

**Online Discussion:**

* Emmanuel present r01
* Nov 2 stays CET, but Wednesday

**Decision:**

* **Agree revision 1**

**S4-221044** is **revised to S4-221151.**

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| [S4-221151](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221151.zip) | Updated Work Plan for MeCAR v2.0 | Xiaomi Communications | Emmanuel Thomas |

**S4-221151** is **agreed.**

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| --- | --- | --- | --- |
| [S4-221060](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221060.zip) | Proposed updates to EDGAR-1 architecture | Xiaomi Communications | Emmanuel Thomas |

**E-mail Discussion:**

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| [[MeCAR, 1060, Block A, 19th Aug 1200CEST] Proposed updates to EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;55d2b3b0.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:14:43 +0000 |
| [[MeCAR, 1060, Block A, 19th Aug 1200CEST] Proposed updates to EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ba9540f5.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 07:02:37 +0000 |
| [[MeCAR, 1060, Block A, 19th Aug 1200CEST] Proposed updates to EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;62e70fd9.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 09:25:26 +0000 |

**Revisions:**

None

**Online Discussion:**

* Emmanuel presents the document
* Stephane: What about audio? Microphone is included here
  + Emmanuel: ongoing discussions on this, we can add a note
* Thomas: This overlaps with 972, what will be do afterwards
  + Emmanuel: only fixing typos
  + Thomas: not wanna be complicated, just overwrites
* Agreed

**Decision:**

* **Agreed for now**

**S4-221060** is **agreed.**

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| --- | --- | --- | --- |
| [S4-221064](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221064.zip) | On frame submission to the AR Runtime in EDGAR-1 architecture | Xiaomi Communications | Emmanuel Thomas |

**E-mail Discussion:**

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| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;688bd918.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:14:56 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3468a87f.2208C&S=) | Tomas Toftgård | Fri, 19 Aug 2022 08:48:08 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;80a0e001.2208C&S=) | Stefan Döhla | Fri, 19 Aug 2022 11:26:34 +0200 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bbeb7ad1.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 09:43:39 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;298040e6.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 09:46:58 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;975421e3.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 09:50:44 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a9dbdbc4.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 09:55:56 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2cc496f4.2208C&S=) | Thomas Stockhammer | Fri, 19 Aug 2022 11:08:34 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7a1f65e3.2208C&S=) | Stephane Ragot | Fri, 19 Aug 2022 12:14:23 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;28fc72d.2208D&S=) | Emmanuel Thomas | Tue, 23 Aug 2022 09:34:30 +0000 |

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| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;36a58772.2208D&S=) | Stefan Döhla | Wed, 24 Aug 2022 17:40:19 +0200 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;904376a1.2208D&S=) | Stephane Ragot | Thu, 25 Aug 2022 08:04:44 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f93d94.2208D&S=) | Thomas Stockhammer | Thu, 25 Aug 2022 08:49:28 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c5e69751.2208D&S=) | Thomas Stockhammer | Thu, 25 Aug 2022 08:56:31 +0000 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7fa5ea71.2208D&S=) | Stefan Döhla | Thu, 25 Aug 2022 11:14:11 +0200 |
| [[MeCAR, 1064, Block A, 19th Aug 1200CEST] On frame submission to the AR Runtime in EDGAR-1 architecture](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;75701f92.2208D&S=) | Thomas Stockhammer | Thu, 25 Aug 2022 09:34:19 +0000 |

**Revisions:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | [S4-221064r01.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221064r01.docx) | 2022/08/19 9:38 | 642,4 KB |
|  | [S4-221064r02.docx](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221064r02.docx) | 2022/08/23 9:24 | 674,1 KB |

**Online Discussion:**

* Part of offline discussion

**Decision:**

* **Merge into 1161**

**S4-221064** is **merged into S4-221161.**

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| [S4-221045](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221045.zip) | On frame submission to the AR Runtime in EDGAR-1 architecture | Xiaomi Communications | Emmanuel Thomas |

**Online Discussion:**

* Assigned from MBS, part of offline

**Decision:**

* **Merge into 1161**

**S4-221064** is **merged into S4-221161.**

## 9.6 FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media)

*WID:* [*SP-200054*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_87E_Electronic/Docs/SP-200054.zip) *Feasibility Study on Typical Traffic Characteristics for XR Services and other Media*

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-220947](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220947.zip) | [FS\_XRTraffic] Discussion on XR Traffic Model | vivo Mobile Communication (S) | Xiaowen Sun |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d8df69e2.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 09:02:14 +0000 |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;df3ad81.2208C&S=) | Fabrice Plante | Wed, 17 Aug 2022 10:15:11 -0700 |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;156f5820.2208C&S=) | Xiaowen Sun | Thu, 18 Aug 2022 03:21:58 +0000 |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;923239b8.2208C&S=) | Thomas Stockhammer | Thu, 18 Aug 2022 12:13:08 +0000 |

|  |  |  |
| --- | --- | --- |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8ed8407d.2208C&S=) | Fabrice Plante | Fri, 19 Aug 2022 14:49:15 -0700 |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cb32e7e.2208D&S=) | Xiaowen Sun | Mon, 22 Aug 2022 02:35:41 +0000 |
| [[FS\_XRTraffic, 947, Block A, 18th Aug 1500CEST] Discussion on XR Traffic Model](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f63b7d16.2208D&S=) | Razvan Andrei Stoica | Mon, 22 Aug 2022 09:39:26 +0000 |

**Revisions:**

none

**Online Discussion:**

* Aug 18 Call
  + Thomas: I support this, we should add the information to the TR.
  + Fabrice: Kind of agree, but should make sure that the TR is consistent
  + Xiaowen: We should update the TR and communicate eventually
  + Qi: First we need to finish the draft TR at this meeting. If finished, it is ok to share.
  + Gilles summarizes: Unclear what is a good time - at this meeting or the next meeting.
  + Proposed way forward:
    - Progress draft TR
    - Once we have an agreed version, we check if we can send an LS or wait for next meeting
  + Proposed way forward agreed.
  + An offline may be scheduled - working with proponents
* Washup:
  + Some content added to TR
  + Otherwise noted

**Decision:**

* **Parked for now.**
* **Finally noted**

**S4-220947** is **noted.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-220973](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220973.zip) | [FS\_XRTraffic] Proposed Updates to TR 26.926 | Qualcomm incorporated | Thomas Stockhammer |

**Online Discussion:**

* Thomas presents:
  + Fabrice: What is expected?
  + Thomas: We can note or agree
* Gilles: Propose to add additions under square brackets
  + agreed

**Decision:**

* **Add square brackets and add to TR 26.926v1.2.0**

**S4-220973** is **agreed.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221170](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221170.zip) | [FS\_XRTraffic] TR 26.926v1.2.0 | Qualcomm incorporated | Thomas Stockhammer |

**S4-221170** is **agreed and presented to SA4 plenary.**

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| --- | --- | --- | --- |
| [S4-220974](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220974.zip) | [FS\_XRTraffic] Proposed Updated Time Plan | Qualcomm incorporated | Thomas Stockhammer |

**Online Discussion:**

* Thomas presents
  + No comments

**Decision:**

* **agreed**

**S4-220974** is **agreed and presented to SA4 plenary.**

## 9.7 FS\_AI4Media (Feasibility Study on Artificial Intelligence (AI) and Machine Learning (ML) for Media)

WID: [SP-220328](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_95E_Electronic_2022_03/Docs/SP-220328.zip) New SID on Artificial Intelligence (AI) and Machine Learning (ML) for Media

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221021](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221021.zip) | [FS\_AI4Media] Proposed Updated Time and Work Plan | Samsung Electronics Benelux BV | Eric Yip |

**Online Discussion:**

* Eric presents
  + Thomas: Nov 2 is CET
  + Eric: ok - typo no issue

**Decision:**

* **agreed**

**S4-221021** is **agreed.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221022](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221022.zip) | [FS\_AI4Media] Permanent Document v0.3 | Samsung Electronics Benelux BV | Eric Yip |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_AI4Media, 1022, Block B, 23rd Aug 1200CEST] Permanent Document v0.3](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a808050.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:49:23 +0000 |
| [[FS\_AI4Media, 1022, Block B, 23rd Aug 1200CEST] Permanent Document v0.3](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;58195835.2208D&S=) | teniou(TeniouGilles) | Tue, 23 Aug 2022 12:11:10 +0000 |

**Revisions:**

none

**Online Discussion:**

* none

**Decision:**

* **Agreed based on e-mail**

**S4-221022** is **agreed.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221160](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221160.zip) | [FS\_AI4Media] Permanent Document v0.4 | Samsung Electronics Benelux BV | Eric Yip |

**S4-221160** is **presented to SA4 plenary.**

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| --- | --- | --- | --- |
| [S4-221023](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221023.zip) | [FS\_AI4Media] Edits to section on use cases and scenarios | Samsung Electronics Benelux BV | Eric Yip |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_AI4Media, 1023, Block B, 23rd Aug 1200CEST] Edits to section on use cases and scenarios](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;18f31f6a.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:49:49 +0000 |
| [[FS\_AI4Media, 1023, Block B, 23rd Aug 1200CEST] Edits to section on use cases and scenarios](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b6662c09.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 18:45:24 +0000 |
| [[FS\_AI4Media, 1023, Block B, 23rd Aug 1200CEST] Edits to section on use cases and scenarios](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;de828c59.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 11:08:22 +0900 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221023r01.docx

**Online Discussion:**

* Gilles summarizes
* Eric presents r01
  + No comments

**Decision:**

* **R01 agreed**
* **Revised**

**S4-221023** is **revised to S4-221157.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221157](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221157.zip) | [FS\_AI4Media] Edits to section on use cases and scenarios | Samsung Electronics Benelux BV | Eric Yip |

**S4-221157** is **agreed.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221024](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221024.zip) | [FS\_AI4Media] Service architecture for split AIML inference with uplink | Samsung Electronics Benelux BV | Eric Yip |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;49f80b4.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:09 +0000 |
| [[FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5251a5e8.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 04:03:43 +0000 |
| [[FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;48a37973.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 15:39:45 +0900 |
| [[FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;df217567.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 18:05:54 +0900 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221024r01.docx

**Online Discussion:**

* Eric presents r01
* On 4.2.1
  + Saba: is the idea that we now go with this version and 1039 will not be included?
    - Gilles: Yes, if agreeable by source of 1039
    - Stephane: ok
  + Saba: does the compression only relate to the AI model? Can we agree on this later? Need to check still with experts
    - Eric: ok with me
  + Imed: one aspect we comment is the architecture. Are these reference or examples? Typically we define the interfaces. We do not define a different interface fo reach new media. Why different interfaces?
    - Eric: this is in order to identify different media flows over the 5G network. Once done, we can identify gaps.
    - Imed: prefer single interfaces and focus on creating call flows. It says now service architecture. Not call it architecture
    - Eric: identify what the user plane data is in each of the scenarios.
    - Gilles: agree that service description is done by a call flow
    - Stephane: agree on call flow, but the architecture is needed to identify end points
    - Imed: Do you have a meaning associated with the colour coding? Or just interfaces?
    - Gilles: from last meeting, we want to specify the interfaces
    - Imed: we should make sure that the colour coding has no meaning
* On 4.2.2:
  + Gilles: you say that the data source is in the network what does this mean?
    - Imed: can use the same generic parts of the network, and can plug-in task specific aspects
    - Gilles: ok
* 1024 is parked

**Decision:**

* **Call 1:** 
  + **revised to 1158 based on r01 and the comments as well merge with 1039**
  + **New e-mail discussion may be started**

**S4-221024** is **revised to S4-221158.**

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| [S4-221158](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221158.zip) | [FS\_AI4Media] Service architecture for split AIML inference with uplink | Samsung Electronics Benelux BV, InterDigital Finland Oy | Eric Yip |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [1158 in drafts [merge of 1024 & 1039] [FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;aaec0db5.2208D&S=) | Eric Yip | Wed, 24 Aug 2022 17:19:24 +0900 |
| [1158 in drafts [merge of 1024 & 1039] [FS\_AI4Media, 1024, Block B, 23rd Aug 1200CEST] Service architecture for split AIML inference with uplink](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8273130a.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 24 Aug 2022 09:23:39 +0000 |

**Online Discussion:**

* Eric presents
  + No comments

**Decision:**

* **agreed**

**S4-221158** is **agreed.**

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| [S4-221025](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221025.zip) | [FS\_AI4Media] Related work in 3GPP | Samsung Electronics Benelux BV | Eric Yip |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1025, Block B, 23rd Aug 1200CEST] Related work in 3GPP](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a4d8639c.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:19 +0000 |
| [[FS\_AI4Media, 1025, Block B, 23rd Aug 1200CEST] Related work in 3GPP](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3d118d16.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 04:14:11 +0000 |
| [[FS\_AI4Media, 1025, Block B, 23rd Aug 1200CEST] Related work in 3GPP](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cc8d16e2.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 15:26:20 +0900 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221025r01.docx

**Online Discussion:**

* Eric presents r01
* Gilles: these are all ongoing studies. We need to keep track of those. Maybe put into PD.
  + Eric: obviously not all of those are relevant to study. Fine to add it to PD.
  + Thomas: yes support this should be added to PD only.

**Decision:**

* **Revision r01 agreed for PD**
* **Revise**

**S4-221025** is **revised to S4-221159.**

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| [S4-221159](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221159.zip) | [FS\_AI4Media] Related work in 3GPP | Samsung Electronics Benelux BV | Eric Yip |

**S4-221159** is **agreed.**

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| [S4-221039](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221039.zip) | [FS\_AI4Media] Architectures and service flows updates | InterDigital Finland Oy | Stephane Onno |

**E-mail Discussion:**

|  |  |  |
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| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b124b343.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:30 +0000 |
| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6f41dbe2.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 19:06:41 +0900 |
| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5a0cc424.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 10:49:40 +0000 |
| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3dec417.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 05:32:59 +0000 |
| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1c3d71c3.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Tue, 23 Aug 2022 08:44:02 +0000 |
| [[FS\_AI4Media, 1039, Block B, 23rd Aug 1200CEST] Architectures and service flows updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;43fbd918.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 18:09:35 +0900 |

**Revisions:**

none

**Online Discussion:**

* See discussion for 1025

**Decision:**

* **Merge into 1158**

**S4-221039** is **merged to S4-221158**

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| [S4-221040](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221040.zip) | [FS\_AI4Media] Object Recognition in Image and Video use-case update | InterDigital Finland Oy | Stephane Onno |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3ccbb410.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:38 +0000 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c6f39fe9.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 19:22:42 +0900 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8cb0e35b.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 12:21:07 +0000 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8bea33d8.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 11:03:29 +0900 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7c32c218.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 05:40:43 +0000 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1d33d6e.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Tue, 23 Aug 2022 09:21:08 +0000 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6d9cdfc6.2208D&S=) | Stephane Onno | Tue, 23 Aug 2022 12:19:03 +0000 |

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| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e54e1b79.2208D&S=) | Stephane Onno | Tue, 23 Aug 2022 17:23:57 +0000 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3f9288a7.2208D&S=) | Eric Yip | Wed, 24 Aug 2022 17:26:34 +0900 |
| [[FS\_AI4Media, 1040, Block B, 23rd Aug 1200CEST] Object Recognition in Image and Video use-case update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2ece5347.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 24 Aug 2022 09:25:14 +0000 |

**Revisions:**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221040_Samsung.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221040r01-Object%20Recognition%20in%20Image%20and%20Video%20use-case%20update.docx

**Online Discussion:**

* Call 2022/08/23
  + Stephane presents \_Samsung revision
    - Imed: my recollection was that the original use case was supporting all scenarios
    - Eric: note that this document is not a Samsung revision, but only adds comments
    - Imed: idea of taking a model and just splitting it, is wrong. We need to have two models and combine them.
    - Gilles: on the SA1 Figure 5.1.1-2, is this not correct
    - Imed: the assumptions from SA1 is not correct, you cannot split easily.
    - Eric: we did some split inference across two devices, but there are feasible points you can do it.
    - Imed: even it it is possible, who would do the split. It would already pre-split. One part for network inference and one for UE inference. Does not easily work together.
    - Eric: in case in two different split points, this can be done.
    - Thomas: if SA1 has made wrong assumptions in deriving their architecture, than we should communicate with them to avoid propagating wrongly into our work.
    - Imed: we may do this, there are different assumptions. Splitting really only work for very simple cases.
    - Gilles: model may be split by proprietary means
    - Imed: I am not comfortable with this, this is not practical
    - Ahmed: Split inference and split learning is well known. There are splitting points that can be identified. This can be predefined.
    - Imed: yes, this is what I said.
    - Stephane: we have done experiments for which it works. Split point is fixed, one model on each side. Dynamic split point may be another consideration to be studied.
    - Imed: not seen split models in literature, only combined models. Seen transfer learning.
    - Thomas: can we make sure that we have a definition of what is meant. Is it a split, or distributed
  + Proposal: Source creates a revision based on comments on e-mail and in this session.
* Call Aug 24, 2022
  + Stephane presents r01
    - No comments

**Decision:**

* **Call 1:**
  + **Source creates revision r01 based on comments**
  + **Parked for now**
* **Call 2:**
  + **Revision r01 agreed**

**S4-221040** is **revised to S4-221167.**

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| [S4-221167](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221167.zip) | [FS\_AI4Media] Object Recognition in Image and Video use-case update | InterDigital Finland Oy | Stephane Onno |

**S4-221167** is **agreed.**

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| [S4-221041](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221041.zip) | [FS\_AI4Media] Split topologies update | InterDigital Finland Oy | Stephane Onno |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1041, Block B, 23rd Aug 1200CEST] Split topologies update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a10447c9.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:48 +0000 |
| [[FS\_AI4Media, 1041, Block B, 23rd Aug 1200CEST] Split topologies update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;efdc5d1c.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 05:24:14 +0000 |
| [[FS\_AI4Media, 1041, Block B, 23rd Aug 1200CEST] Split topologies update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c5f63b0a.2208D&S=) | Stephane Onno | Tue, 23 Aug 2022 09:04:37 +0000 |
| [[FS\_AI4Media, 1041, Block B, 23rd Aug 1200CEST] Split topologies update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5f55bcf2.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Tue, 23 Aug 2022 09:36:44 +0000 |

**Revisions:**

none

**Online Discussion:**

* Stephane presents
* Saba: repeat the comments from e-mail
  + We do not understand why the UE is sending information back and forth
  + Stephane: UE sends video to network. Network does inference
* Gilles: What about the privacy?
  + Imed: particular relevant on Figure 4.1.1.1-1. This protects. Second one should be M1.
  + Saba: When we send intermediate data, we should be clear how this is done.
* Gilles: Contribution is likely to be agreed by clarifying some details.

**Decision:**

* **Agreed with typo to be corrected: M0 -> M1**

**S4-221041** is **agreed.**

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| [S4-221042](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221042.zip) | [FS\_AI4Media] Updates to definitions | InterDigital Finland Oy | Stephane Onno |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c92656ea.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:50:59 +0000 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;946ba182.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 19:36:39 +0900 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;31ea4724.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 18:42:28 +0000 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8c35cb99.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 11:06:23 +0900 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ee5c84d3.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 05:48:57 +0000 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4b54facd.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Tue, 23 Aug 2022 08:29:23 +0000 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6d175e9c.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 17:52:20 +0900 |
| [[FS\_AI4Media, 1042, Block B, 23rd Aug 1200CEST] Updates to definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;351acd5e.2208D&S=) | Stephane Onno | Tue, 23 Aug 2022 09:20:05 +0000 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221042r01-Updates%20to%20definitions.docx

**Online Discussion:**

* Stephane presents r01
  + No comments

**Decision:**

* **Revision r01 agreed**

**S4-221042** is **revised to S4-221168.**

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| [S4-221168](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221168.zip) | [FS\_AI4Media] Updates to definitions | InterDigital Finland Oy | Stephane Onno |

**S4-221168** is **agreed.**

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| [S4-221043](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221043.zip) | [FS\_AI4Media] New Neural Network hybrid coding use-case | InterDigital Finland Oy | Stephane Onno |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;613ce826.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:51:17 +0000 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ab378d7.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 19:49:45 +0900 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2ddfded3.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 18:43:30 +0000 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fa18df3e.2208D&S=) | Eric Yip | Tue, 23 Aug 2022 11:23:00 +0900 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8ddc0f6e.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 03:43:52 +0000 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7e6d9f7d.2208D&S=) | Stephane Onno | Tue, 23 Aug 2022 08:58:22 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8229face.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 19:54:40 +0900 |

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| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d729e4a5.2208D&S=) | Imed Bouazizi | Thu, 25 Aug 2022 05:12:44 +0000 |
| [[FS\_AI4Media, 1043, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fd83776e.2208D&S=) | Stephane Onno | Thu, 25 Aug 2022 11:23:37 +0000 |

**Revisions:**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_120-e/Inbox/Drafts/Video/S4-221043-New%20Neural%20Network%20hybrid%20coding%20use-case_ib.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221043r01-New%20Neural%20Network%20hybrid%20coding%20use-case.docx

**Online Discussion:**

* Call 2022/08/24
  + Stephane presents
  + Imed: I made the point that I made in e-mail that we have systems. Second one is receiver-only, no metadata streams needed. Maybe just what the type content it is. The first one should made very generic, it is a video coding technology
    - Stephane: in case 2, there is specific metadata that needs to be sent. It could be per frame metadata
    - Thomas: believe there are three cases: one that data is essential for the quality and needs to be processed by the receiver, in second one it is metadata that is nice to have, and the third one is receiver only
    - Imed: agreed
    - Eric: where the model comes from, may be the encoder or pre-processor
    - Imed: we need to also differentiate the frequency and configuration of the exchanged metadata.
  + Imed: I can do some revision, that focuses on the metadata to be exchanged.
  + Revision expected by Imed.
  + Parked
* Call 2022/08/25
  + Stephane presents r01
  + Imed: I am still confused
    - Stephane: 3.2.1 is completely different than the other case
    - Imed: I am lacking a receiver only approach
    - Stephane: audio encoder is kind split, it is not the same as the second
    - Imed: in the second one, is the metadata dynamic or static
    - Stephane: Have added a pointer to JVET docsc that follow 3.2.2
    - Imed: can I propose to have a larger heading on two categories, where we have a receiver only approach, no extra metadata from sender.
  + Eric: We would separate this better the different approach
    - Imed: support this was part of Qualcomm revision
    - Stephane: We can have static configuration before starting
  + Gilles proposes to have a sub-heading adding sender-receiver approaches.
    - Agreed
    - https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221043r01-New%20Neural%20Network%20hybrid%20coding%20use-case-onlineEdits.docx

**Decision:**

* **Call 1:**
  + **Parked**
  + **Qualcomm offers a revision**
* **Call 2:**
  + **Online edits agreed**
  + **Needs revision**

**S4-221043** is **revised to S4-221171.**

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| [S4-221171](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221171.zip) | [FS\_AI4Media] New Neural Network hybrid coding use-case | InterDigital Finland Oy | Stephane Onno |

**S4-221171** is **agreed.**

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| --- | --- | --- | --- |
| [S4-221093](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221093.zip) | AI/ML model optimization for transport | Qualcomm Technologies Ireland | Imed Bouazizi |

**E-mail Discussion:**

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| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3125d1cb.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 10:55:19 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f21be7cb.2208D&S=) | Eric Yip | Mon, 22 Aug 2022 20:27:29 +0900 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ac900ac4.2208D&S=) | Stephane Onno | Mon, 22 Aug 2022 19:35:00 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;19d325e4.2208D&S=) | Tech, Gerhard | Mon, 22 Aug 2022 22:56:52 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;619e83a4.2208D&S=) | Imed Bouazizi | Tue, 23 Aug 2022 03:43:42 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8995399a.2208D&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Tue, 23 Aug 2022 08:34:49 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5ee5cc59.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:51:41 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] New Neural Network hybrid coding use-case](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;23a8a8ca.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 10:55:58 +0000 |

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| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6279ba3d.2208D&S=) | Zhao, Shuai | Tue, 23 Aug 2022 18:35:54 +0000 |

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| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d3fb6a41.2208D&S=) | Imed Bouazizi | Wed, 24 Aug 2022 14:15:48 +0000 |
| [[FS\_AI4Media, 1093, Block B, 23rd Aug 1200CEST] AI/ML model optimization for transport](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9caf2bb.2208D&S=) | Stephane Onno | Wed, 24 Aug 2022 14:49:47 +0000 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221093\_Model\_optimization\_for\_transport\_r01.docx

**Online Discussion:**

* 2022/08/24
  + Gilles quickly presents is
    - Imed: please avoid to make recommendations at this stage. We should study
    - Imed will provide a revision
  + Decision and revise and park
* 2022/08/25
  + Imed presents r01
    - No comments

**Decision:**

* **Call 1:**
  + **Imed creates revision**
  + **Parked**
* **Call 2:**
  + **Revision r01 agreed for PD**
  + **Please keep reference**

**S4-221093** is **revised to S4-221172.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221093](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221093.zip) | AI/ML model optimization for transport | Qualcomm Technologies Ireland | Imed Bouazizi |

**S4-221172** is **agreed.**

## 9.8 FS\_ARMRQoE (Feasibility Study on AR and MR QoE Metrics)

WID: [SP-220616](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/Docs/SP-220616.zip) New SID on Feasibility Study on AR and MR QoE Metrics

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221003](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221003.zip) | Collection of current work on ARMR QoE in ITU-T | Huawei, Hisilicon, China Unicom | Qi Pan |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_ARMRQoE, 1003, Block B, 24th Aug 1200CEST] Collection of current work on ARMR QoE in ITU-T](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dfe7bed9.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:58:25 +0000 |
| [[FS\_ARMRQoE, 1003, Block B, 24th Aug 1200CEST] Collection of current work on ARMR QoE in ITU-T](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;349d3a1c.2208D&S=) | Curcio, Igor (Nokia - FI/Tampere) | Tue, 23 Aug 2022 09:11:22 +0000 |
| [[FS\_ARMRQoE, 1003, Block B, 24th Aug 1200CEST] Collection of current work on ARMR QoE in ITU-T](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;17fa0055.2208D&S=) | panqi (E) | Tue, 23 Aug 2022 09:42:29 +0000 |
| [[FS\_ARMRQoE, 1003, Block B, 24th Aug 1200CEST] Collection of current work on ARMR QoE in ITU-T](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;16115918.2208D&S=) | Curcio, Igor (Nokia - FI/Tampere) | Tue, 23 Aug 2022 10:13:48 +0000 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221003r01.docx

**Online Discussion:**

* Qi presents r01
  + No comments
  + Gilles: just make sure that styles are appropriate

**Decision:**

* **R01 is agreed**
* **revised**

**S4-221003** is **revised to S4-221163.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221163](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221163.zip) | Collection of current work on ARMR QoE in ITU-T | Huawei, Hisilicon, China Unicom | Qi Pan |

**S4-221163** is **agreed.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221008](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221008.zip) | [FS\_ARMRQoE] TR 26.812 skeleton v0.0.1 | China Unicom | Shuai Gao |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_ARMRQoE, 1008, Block B, 24th Aug 1200CEST] Draft TR 26.812 skeleton v0.0.1](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;30dd5a22.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:58:02 +0000 |
| [[FS\_ARMRQoE, 1008, Block B, 24th Aug 1200CEST] Draft TR 26.812 skeleton v0.0.1](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;facc4276.2208D&S=) | Curcio, Igor (Nokia - FI/Tampere) | Tue, 23 Aug 2022 09:03:05 +0000 |
| [[FS\_ARMRQoE, 1008, Block B, 24th Aug 1200CEST] Draft TR 26.812 skeleton v0.0.1](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7b03ca48.2208D&S=) | Shuai, China Unicom | Tue, 23 Aug 2022 10:52:58 +0100 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221008r01.docx

**Online Discussion:**

* Shuai presents r01
  + No comments

**Decision:**

* **Revision r01 is agreed**
* **Needs revision**

**S4-221008** is **revised to S4-221164.**

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| --- | --- | --- | --- |
| [S4-221164](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221164.zip) | [FS\_ARMRQoE] TR 26.812 skeleton v0.0.1 | China Unicom | Shuai Gao |

**S4-221164** is **agreed and will be presented to SA4 plenary.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221165](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221165.zip) | TR 26.812 v0.1.0 | China Unicom | Shuai Gao |

**Online Discussion:**

* Gilles presents

**Decision:**

* **agreed**

**S4-221165** is **agreed and will be presented to SA4 plenary.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-221009](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221009.zip) | Work Plan for the study on ARMR QoE metrics V1.0 | China Unicom | Shuai Gao |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS ARMRQoE, 1009, Block B, 24th Aug 1200CEST] Work Plan for the study on ARMR QoE metrics V1.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d4021635.2208D&S=) | gaos30 | Tue, 23 Aug 2022 13:02:37 +0800 |
| [[FS ARMRQoE, 1009, Block B, 24th Aug 1200CEST] Work Plan for the study on ARMR QoE metrics V1.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f07e616a.2208D&S=) | Curcio, Igor (Nokia - FI/Tampere) | Tue, 23 Aug 2022 09:15:32 +0000 |
| [[FS ARMRQoE, 1009, Block B, 24th Aug 1200CEST] Work Plan for the study on ARMR QoE metrics V1.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8fa38282.2208D&S=) | gaos30 | Tue, 23 Aug 2022 18:14:27 +0800 |
| [[FS ARMRQoE, 1009, Block B, 24th Aug 1200CEST] Work Plan for the study on ARMR QoE metrics V1.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d37781e3.2208D&S=) | Shuai, China Unicom | Tue, 23 Aug 2022 11:21:02 +0100 |

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| [[FS\_ARMRQoE, 1009, Block B, 24th Aug 1200CEST] Work Plan for the study on ARMR QoE metrics V1.0](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4d609f7a.2208D&S=) | teniou(TeniouGilles) | Mon, 22 Aug 2022 09:58:13 +0000 |

**Revisions:**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_120-e/Inbox/Drafts/Video/S4-221009r01.docx

**Online Discussion:**

* Shuai presents r01

**Decision:**

* **Revision r01 is agreed**
* **Needs revision**

**S4-221009** is **revised to S4-221166.**

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| --- | --- | --- | --- |
| [S4-221166](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-221166.zip) | Work Plan for the study on ARMR QoE metrics V1.0 | China Unicom | Shuai Gao |

**S4-221166** is **agreed.**

## 9.9 New Work / New Work Items and Study Items

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-220975](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_120-e/Docs/S4-220975.zip) | Follow-up on TR 26.955: HEVC Improvements | Qualcomm incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[New Work, 975, Block A, 18th Aug 1500CEST] Follow-up on TR 26.955: HEVC Improvements](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7578d74b.2208C&S=) | teniou(TeniouGilles) | Wed, 17 Aug 2022 08:59:06 +0000 |
| [[New Work, 975, Block A, 18th Aug 1500CEST] Follow-up on TR 26.955: HEVC Improvements](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6426332.2208C&S=) | Fabrice Plante | Wed, 17 Aug 2022 18:05:45 -0700 |

**Revisions:**

none

**Online Discussion:**

* Aug 18, 2022 call
  + Thomas presents
    - Response to Apple comments - it is screen content, not Screen Content
  + Justin:
    - Implementation guidelines should be aligned with VR-IF
    - Matching implementations is unclear
    - Thomas:
      * we can always align with industry practices and can add a statement
      * Implementations, I am just referring that HEVC is a tool used in services, not about new services.
    - Gilles: Would it be about upgrades from may to should?
      * Thomas: not necessarily. Also around interoperability beyond video specifications, in particular for low-latency services.
  + Conclusion: Check for interest until Block A plenary. If no interest, we do not proceed at this meeting. Otherwise we do so. Document is parked
* Aug 25, 2022 call
  + Thomas reports that he received feedback from 3 other companies
  + Will use this feedback for follow-up
  + Can be safely noted
  + Thanks everyone

**Decision:**

* **noted**

**S4-220975** is **noted.**

## 9.10 Liaisons and Liaison Responses

See 9.3

## 9.11 Any Other Business

### 9.11.1 Report

The report will be made available in **S4-220917**.

### 9.11.2 Summary from Offline Discussions

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| --- | --- | --- |
| [[MeCAR] Offline #2 on visual rendering (1064 and 1045)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e6af6027.2208D&S=) | Emmanuel Thomas | Mon, 22 Aug 2022 17:48:25 +0000 |
| [[MeCAR] Offline #2 on visual rendering (1064 and 1045)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;34a46997.2208D&S=) | Dimitri Podborski | Tue, 23 Aug 2022 14:02:09 -0700 |
| [[MeCAR] Offline #2 on visual rendering (1064 and 1045)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e879b252.2208D&S=) | Imed Bouazizi | Wed, 24 Aug 2022 13:18:30 +0000 |
| [[MeCAR] Offline #2 on visual rendering (1064 and 1045)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5fa5df69.2208D&S=) | Emmanuel Thomas | Wed, 24 Aug 2022 13:35:44 +0000 |

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| [[Offline] MeCAR device categories discussion (triggered by S4-220972)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2869292.2208C&S=) | Emmanuel Thomas | Fri, 19 Aug 2022 20:07:59 +0000 |
| [[Offline] MeCAR device categories discussion (triggered by S4-220972)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;864e0936.2208D&S=) | Emmanuel Thomas | Mon, 22 Aug 2022 13:19:35 +0000 |
| [[Offline] MeCAR device categories discussion (triggered by S4-220972)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;beb7afd6.2208D&S=) | Emmanuel Thomas | Mon, 22 Aug 2022 15:12:20 +0000 |

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| [3GPP SA4 Video SWG Offline on Reply LS to SA2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d8c19c6e.2208D&S=) | Thomas Stockhammer | Tue, 23 Aug 2022 03:02:01 +0000 |
| [3GPP SA4 Video SWG Offline on XR Traffic](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9cbc98a7.2208D&S=) | Thomas Stockhammer | Mon, 22 Aug 2022 15:51:49 +0000 |
| [3GPP SA4 Video SWG Offline on XR Traffic (part 2)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1e4d2b05.2208D&S=) | Thomas Stockhammer | Wed, 24 Aug 2022 14:43:08 +0000 |

### 9.11.3 Output documents

Gilles please add

### 9.11.3 AHG Telcos

|  |
| --- |
| 3GPP SA4 Video SWG Telco (September 20, 2022, 15:30 – 17:30 CEST, Host Qualcomm) |
| 3GPP SA4 Video SWG Telco (October 11, 2022, 15:30 – 17:30 CEST, Host Qualcomm) |
| 3GPP SA4 Video SWG Telco (November 2, 2022, 15:30 – 17:30 CET, Host Qualcomm) |

## 9.12 Close of the session

The chairman thanked the participants. Thomas Stockhammer thanked the chairman on behalf of the delegates.

The online session was closed on August 25, 2022 at 17:00 (CEST).

No more e-mail approval is pending.

## 9.13 Attendees

| **TITLE** | **Family Name** | **Given Name** | **Organization Represented** | **Present** |
| --- | --- | --- | --- | --- |
| Dr. | Ahsan | Saba | Nokia Denmark |  |
| Mr. | Ani Simi | Gokul Sani | ORS |  |
| Mr. | Aracena | Mauricio | Ericsson España S.A. |  |
| Mr. | AUMONT | FRANCK | InterDigital Belgium. LLC |  |
| Dr. | Bouazizi | Imed | Qualcomm Technologies Ireland |  |
| Dr. | Bradbury | Richard | BBC |  |
| Dr. | Bruhn | Stefan | Dolby Laboratories Inc. |  |
| Dr. | Budagavi | Madhukar | Samsung Electronics Nordic AB |  |
| Mr. | Burman | Bo | Ericsson France S.A.S |  |
| Dr. | Cetinkaya | Egemen | Verizon Denmark |  |
| Mr. | Champel | Mary-Luc | Beijing Xiaomi Electronics |  |
| Dr. | Chan | Yee Sin | Facebook India |  |
| Dr. | Chen | Lulin | MediaTek Inc. |  |
| Mr. | Choi | Hyung-Nam | Motorola Mobility UK Ltd. |  |
| Mr. | Chou | Joey | Intel Korea, Ltd. |  |
| Dr. | Curcio | Igor | Nokia Italy |  |
| Mr. | Dawkins | Spencer | Tencent |  |
| Mr. | De Bont | Frans | Philips International B.V. |  |
| Mr. | Defrance | Serge | InterDigital, Inc. |  |
| Mr. | Doehla | Stefan | Fraunhofer IIS |  |
| Mr. | Donovan | Steve | Oracle Corporation |  |
| Dr. | Ehara | Hiroyuki | Panasonic Holdings Corporation |  |
| Dr. | El Essaili | Ali | Ericsson Limited |  |
| Mr. | Fontaine | Loic | InterDigital France R&D, SAS |  |
| Mr. | Gabin | Frederic | Dolby Laboratories Inc. |  |
| Mr. | Gao | Shuai | China Unicom |  |
| Mr. | Gao | Yuan | Huawei Technologies France |  |
| Mr. | Gibellino | Diego | TELECOM ITALIA S.p.A. |  |
| Dr. | Gorley | Paul | BBC |  |
| Mr. | Gu | Xiaojun | Huawei Technologies R&D UK |  |
| Mr. | Gudumasu | Srinivas | InterDigital Communications |  |
| Mr. | Gunkel | Simon | KPN N.V. |  |
| Mr. | Guo | Yi | Intel Belgium SA/NV |  |
| Dr. | Hamza | Ahmed | InterDigital Communications |  |
| Dr. | Han | Jaemin | Intel Romania |  |
| Dr. | He | Xuan (Shane) | Nokia France |  |
| Dr. | He | Yong | Qualcomm Tech. Netherlands B.V |  |
| Mr. | Heikkilä | Gunnar | Ericsson Japan K.K. |  |
| Mr. | Henry | Dan | NTIA |  |
| Dr. | Holub | Jan | Mesaqin.com s.r.o (Ltd.) |  |
| Mr. | Homkar | Ajay | Cadence Design Systems Inc. |  |
| Mr. | Howells | Elfed | Huawei Device Co., Ltd |  |
| Dr. | Hu | James | AT&T GNS Belgium SPRL |  |
| Mr. | Jansson Toftgård | Tomas | Ericsson Inc. |  |
| Dr. | Jelinek | Milan | VoiceAge Corporation |  |
| Miss | Jian | Mengzhen | China Telecommunications |  |
| Mr. | Jin | James | GUANGDONG GENIUS TECHNOLOGY CO |  |
| Dr. | Joshi | Rajan | Samsung Electronics Romania |  |
| Dr. | Jung | Kyunghun | Meta USA |  |
| Ms. | Kang | HyunJeong | Samsung Electronics France SA |  |
| Dr. | Karampatsis | Dimitrios | Lenovo (Beijing) Ltd |  |
| Miss | ke | xiaowan | vivo Communication Technology |  |
| Miss | Kedalagudde | Meghashree D | Intel Corporation SAS |  |
| Dr. | Kim | Jiwoo | Facebook India |  |
| Dr. | Kim | Joel | Meta Ireland |  |
| Dr. | Kim | Wuk | Harman GmbH |  |
| Dr. | Kolan | Prakash | Samsung Research America |  |
| Mr. | Kolekar | Abhijeet | Intel |  |
| Dr. | Kondrad | Lukasz | Nokia Poland |  |
| Dr. | Kroon | Peter | Apple Benelux B.V. |  |
| Mr. | Kuchibhotla | Ravi | Motorola Mobility UK Ltd. |  |
| Mr. | Kwon | WooSuk | LG Electronics Inc. |  |
| Mr. | Laaksonen | Lasse | Nokia UK |  |
| Dr. | Lee | Brian | Dolby Laboratories Inc. |  |
| Dr. | Lee | Hakju Ryan | SAMSUNG R&D INSTITUTE JAPAN |  |
| Dr. | Lei | Yixue | Tencent |  |
| Mr. | Lemotheux | Julien | Orange Spain |  |
| Mr. | Leung | Nikolai | Qualcomm Incorporated |  |
| Miss | LI | QIUTING | ZTE Corporation |  |
| Dr. | Liangping | Ma | QUALCOMM Europe Inc. - Italy |  |
| Mr. | Libunao | Gerardo | Verizon UK Ltd |  |
| Mr. | Lin | YuanChieh (Carlson) | MediaTek (Shenzhen) Inc. |  |
| Dr. | Litwic | Lukasz | Ericsson India Private Limited |  |
| Mr. | Liu | Dan | ZTE Corporation. |  |
| Mr. | Lo | Charles | Qualcomm Israel Ltd. |  |
| Dr. | Lohmar | Thorsten | Ericsson GmbH, Eurolab |  |
| Mr. | Luetzenkirchen | Thomas | Intel Deutschland GmbH |  |
| Mr. | Lyu | Huazhang | vivo Mobile Communication (H) |  |
| Miss | Martinez Tarradell | Marta | Intel Corporation Italia SpA |  |
| Dr. | Mccarthy | Sean | Dolby Laboratories Inc. |  |
| Dr. | Mika | Johann | ORS |  |
| Mr. | Morita | Naotaka | NTT Advanced Technology Corpor |  |
| Dr. | Moriya | Takehiro | NTT |  |
| Mr. | Multrus | Markus | Fraunhofer IIS |  |
| Mr. | NAKAMURA | Kazuo | NICT |  |
| Mr. | Nakano | Yusuke | KDDI Corporation |  |
| Mr. | Nangia | Vijay | Motorola Mobility UK Ltd. |  |
| Dr. | Ni | Hui | HiSilicon Technologies Co. Ltd |  |
| Mr. | Niang | Mamadou M. | Verizon Spain |  |
| Dr. | Oh | Sejin | Dolby Laboratories Inc. |  |
| Mr. | O'Leary | Edward | Rogers Communications Canada |  |
| Mr. | Onno | Stephane | InterDigital Finland Oy |  |
| Dr. | Palat | Sudeep | Intel Corporation (UK) Ltd |  |
| Dr. | Pan | Qi | Huawei Telecommunication India |  |
| Mr. | Pazos | Marcelo | Qualcomm Europe Inc. Sweden |  |
| Dr. | Peng | Ke | OPPO |  |
| Mr. | Pihlajakuja | Tapani | Nokia |  |
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| Mr. | Stein | Alan | InterDigital, Europe, Ltd. |  |
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| Mr. | Varga | Imre | Qualcomm Austria RFFE GmbH |  |
| Mr. | Wang | Bin | Xiaomi Technology |  |
| Mr. | Wang | Dong | Guangdong OPPO Mobile Telecom. |  |
| Mr. | Wang | Wen | vivo Mobile Com. (Chongqing) |  |
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| Dr. | Wey | Jun Shan | Verizon Switzerland AG |  |
| Ms. | WU | Jinhua | Beijing Xiaomi Mobile Software |  |
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| Mr. | Xie | Minjie | OPPO |  |
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| Mr. | yan | hua | ZTE Corporation |  |
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